

CLAIMS

What is claimed is:

*Sub P3*  
5 1. A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition.

10

2. The method of claim 1, further including:

providing the second service module to the printer user.

3. The method of claim 2, further comprising providing a set of instructions for using the second service module with the inkjet printer to the printer user.

4. The method of claim 3, further comprising:

removing the first service module from the printer; installing the second service module in the printer; using the set of instructions and the second service module, conducting a special servicing operation.

5

5. The method of claim 1, further comprising:

removing the first service module from the printer; installing the second service module in the printer in place of the first service module;

5

using the second service module, conducting a special printhead-related servicing operation.

*Sub E1*

6. The method of claim 5, further comprising:  
after completion of the special printhead-related  
servicing operation, removing the second service module  
from the printer; and

5 install the first service module in the printer in  
place of the second service module.

*Sub E2*

---

7. The method of claim 3, wherein the step of  
providing a set of instructions includes providing a set of  
machine readable printer instruction code for loading into  
the printer.

8. The method of claim 7 wherein the printer is  
controlled by a host computer, and wherein the step of  
using the set of instructions includes downloading the set  
of printer instruction code from the host computer.

*Sub E3*

---

9. The method of claim 3, wherein the step of  
providing a set of instructions includes providing a set of  
human-readable instructions for using the second service  
module.

10. The method of claim 1, wherein said printhead-  
related service condition comprises fibers accumulating on  
the printhead nozzle plate, and wherein the second service  
module includes a brush to remove the fibers.

*Sub A4*

---

5 11. The method of claim 1, wherein said printhead-  
related service condition includes ink accumulation on the  
nozzle plate, and wherein the second printhead cleaner  
includes a wiper or applicator having applied thereto a  
cleaning fluid for removing the ink accumulation.

12. The method of claim 1, wherein said printhead-  
related service condition includes ink accumulation on the

~~Cond Subj~~ nozzle plate, and wherein the second printhead cleaner includes a wiper fabricated of silicon, or a textile, or a special rubber for removing the ink accumulation.

13. The method of claim 1, wherein said printhead-related service condition includes global depriming of the printhead or ink starvation of the printhead, and wherein the second service module includes a negative pressure primer.

5

~~Subj~~ 14. The method of claim 1, wherein said printhead-related service condition includes ink on a printhead carriage interconnect, and the second service module includes a brush arranged to clean the interconnect.

5

15. The method of claim 1, wherein said printhead-related service condition includes vibration or shock incurred during shipment or moving of the printer, and the second service module includes a special capping structure having a range of movement along an axis generally transverse to a nozzle array of the printhead, and a bias structure which urges the capping structure toward and into engagement with the printhead during a capping procedure.

16. The method of claim 15 wherein the special capping structure includes a relative hard, non-resilient cap structure which contacts the printhead during the capping procedure.

~~Subj 15~~ 17. A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:

5 providing a second service module different from the  
*Cond Sub P5*  
first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module; and

18. The method of Claim 17, further comprising providing a set of instructions for using the second service module with the inkjet printer to the printer user.

19. The method of claim 18, wherein the step of providing a set of instructions includes providing a set of machine readable printer instruction code for loading into the printer.

*Sub A* 20. The method of claim 18 wherein the printer is controlled by a host computer, and wherein the step of using the set of instructions includes downloading (the) set of printer instruction code from the host computer.

21. The method of claim 18, wherein the step of providing a set of instructions includes providing a set of human-readable instructions for using the second service module.

22. The method of claim 17, further comprising:  
after completion of the printhead-related servicing  
operation, removing the second service module from the  
printer; and

5 installing the first service module in the printer in  
place of the second service module.

23. The method of claim 17, wherein said printhead-related service condition comprises fibers accumulating on a printhead nozzle plate, and wherein the second service module includes a brush to remove the fibers.

24. The method of claim 17, wherein said printhead-related service condition includes ink accumulation on the nozzle plate, and wherein the second service module includes a wiper or applicator having applied thereto a  
5 cleaning fluid for removing the ink accumulation.

25. The method of claim 17, wherein said printhead-related service condition includes ink accumulation on a printhead nozzle plate, and wherein the second service module includes a wiper fabricated of silicon, or a  
5 textile, or a special rubber for removing the ink accumulation.

26. The method of claim 17, wherein said printhead-related service condition includes global depriming of the printhead or ink starvation of the printhead, and wherein the second service module includes a negative pressure primer.  
5

27. The method of claim 17, wherein said printhead-related service condition includes ink on a printhead carriage interconnect, and the second service module includes a cleaning element arranged to clean the  
5 interconnect during a special cleaning mode with the printhead removed from the carriage.

28. An inkjet printing system, comprising:  
an inkjet printhead;  
a service area for performing service functions on the  
printhead;

5           a first service module for removable mounting at the service area to perform service functions on the printhead during a standard printhead service mode;

10          a second service module for removable mounting at the service area in place of the first service module to perform a different service function on the printhead during a special printhead service mode.

29. The system of Claim 28 further comprising:

a printhead carriage for mounting the printhead and arranged for traversing movement along a print area and for moving to the service area;

5           a service carriage for removably mounting the first service module or the second service module.

Sub A7  
5          30. A special service module for use in an inkjet printing system including an inkjet printhead and a standard service module removably installed in the printing system, the special service module configured to be removably installed in the printing system in place of the standard service module to perform a special service function on the printhead which is not performed by the standard service module.

ADD  
AS